DOCUMENT RESUME

ED 073 630 EM 010 777

AUTHOR	Stukat, Karl-Gustaf
TITLE	Microteaching.
INSTITUTION	National Swedish Board of Education, Stockholm.
PUB DATE	Nov 72
NOTE	8p.; School Research Newsletter 1972:16
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Effective Teaching; Interaction Process Analysis; *Microteaching; Self Concept; *Self Evaluation; Social Relations; Student Teachers; *Teacher Behavior; *Teacher Education; Teacher Evaluation; Teaching Experience; *Video Tape Recordings
IDENTIFIERS	*Flanders Interaction Analysis; Sweden

ABSTRACT

Microteaching (MT) has been used for teacher training in the United States for over ten years with varying amounts of success. This newsletter reviews two experiments in MT that were conducted in Sweden. The first experiment sought to determine whether MT was appropriate for teacher training. Using a factorial design study supplemented by videotape practice lessons, the investigators concluded that MT did not have any long term effects on the teachers. The second experiment was designed to allow student teachers to distinguish "effective" from "less effective" teacher behavior. Flander's interaction analysis was taught to the student teachers so that they could evaluate themselves on videotape. The results showed very positive attitudes to self confrontation. (MC)

NATIONAL BOARD OF EDUCATION
BUREAU L 3
S - 106 42 STOCKHOLM SWEDEN

SCHOOL RESEARCH newsletter

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

ED 073630

EM 010 777

November 1972 Current project 1972:16

Project title: Microteaching

In progress at: Department of Educational Research, Gothenburg School of Education

Scientific leader: Professor Karl-Gustaf Stukát

Project leader: Fil lic Crister Brusling

Background

Microteaching (MT) is a method of teaching practice used in basic and in-service teacher training. It is called "micro" because teaching is conducted in small groups of 1 - 5 pupils and for periods of 5 - 10 minutes, in addition to which the teacher's task is confined to practising one particular teaching skill at a time. As an example we can take the ability to ask intellectually stimulating questions as distinct from questions to be answered from memory alone. Good examples of the skill being put to practical use are often presented via video-tapes. Closed circuit television is also used to record the student-teacher's teaching practice so that it can then be played back and analysed by him. Sometimes this analysis is combined with criticism from the tutor. Teaching practice and subsequent play-back are repeated until the student-teacher feels that he has mastered the skill in question.

This technique has been in use in the USA since the beginning of the 1960s. There is a wealth of evidence to suggest that it can effectively change teacher behaviour.

Hitherto some twenty different teacher skills have been identified, but there are many of these skills whose connection with pupil variables such as learning, attitudes and interests has yet to be proved.

Aim:

The overall aim is to test if microteaching can be used in teacher training in Sweden.

EXPERIMENT 1

Aim:

The natural procedure to begin with seemed to be to collect comprehensive information concerning the efficacy of the technique in different conditions. We wanted to test:

a) The effect of showing good examples of the teaching skill to be practised (models).

b) The effect of being able to see and hear oneself after the short practice session (self-confrontation).

c) The effect of focussing attention on the educationally relevant features of the model tape. This was achieved by means of acoustic signals inserted at each point where the skill was demonstrated.

d) Possible interaction between the sex of the trainee and that of the model teacher.

e) The effect of different combinations of items a - c, supra.

Scope:

The subjects were 43 middle level teachers in the fourth term of their training.

Methods:

The study was given the form of an experiment with a so-called factorial design. The subjects practised the technique of leading a classroom discussion without talking too much themselves, making use instead of non-verbal behaviour - mime, gestures, moving about the room etc.

The video-taped practice lessons were observed by trained observers and the number of non-verbal behavioural manifestations counted. The length of time for which teacher and pupils respectively spoke was also measured.

Two months after the experimental processing, the subjects were video-taped in ordinary classrooms to see whether any changes in their behaviour were of a permanent nature.

Results:

Most of the subjects made progress regardless of the type of treatment involved. The availability of a perceptual model had a certain positive effect, but the presence or absence of accoustic signals in the recording was of no consequence.

The effects of self-confrontation were difficult to interpret since they were not identical for all lessons.

Most of the positive effects of MT had disappeared two months later when the subjects were observed in their classes during their practice term.

The amount of teacher speech revealed a connection with the amount of pupil speech. The less the teacher spoke, the more the pupils spoke. On the other hand there was on the

whole no connection between the amount of pupil speech and the various measures of non-verbal behaviour on the part of the teacher. This result shows the importance of determining the degree of correlation between the teacher skill proposed and pupil behaviour.

EXPERIMENT 2

Background:

Although MT in its original form has proved an efficacious means of changing the behaviour of trainee teachers with regard to series of "teacher skills" (Cooper & Allen 1969), the technique has not been without its critics (e g Guelcher et al 1970, Pereira & Guelcher 1970, Nashe & Agne 1971, Schaefer 1970). In terms of practical economics it is a rather unwieldy technique. Then there are the timetable inconveniences involved in arranging MT for large groups of trainee teachers. A large supply of pupils is needed and this is not always available, with the result that many institutions have used the trainees' fellow students as pupils instead of the "genuine article". Apart from the fact that the progenitors do not accept this as genuine MT, comparative studies have shown that different sub-skills are acquired in the different situations (Nuthall 1972) and that transfer to "real" pupils in a "real" classroom is impeded by the use of fellow students for MT purposes. (Johnson & Pancrazio 1971).

Video-tape recording and reproduction apparatus is expensive to purchase and maintain. Nor have video-taped recording of teaching practice been shown always to be superior to other, simpler forms of feedback such as tape recordings (Call et al 1971).

The practice of a number of teaching skills is considered by some trainers to be excessively fragmentary. Fears have been expressed of the overall dynamic character of teaching being lost sight of. Sometimes pupils in MT groups have been found to regard practice teaching as incoherent and

pointless: perhaps this is liable to happen in a situation in which the trainee teacher is told to concentrate more on the technique to be practised and less on the subject content to be taught.

The widespread use of MT should be attributed to a widespread discontent with conventional practice teaching and tuition. The latter cannot offer the same educationally effective components as MT: clearly defined goals making it possible to give specific and easily communicable information about the result of the exercise (feedback) and to provide a simple indication of progress.

Although there is a certain amount of justification for the practice of skills with the aid of MT in teacher training, it is clear that different techniques are needed so as to counter the criticism levelled both at MT and at traditional teaching practice and tuition. One such technique is to be found in the use of instruments for systematic observation together with suitable forms of feedback.

Aim:

Flanders' interaction analysis is probably the instrument for systematic observation which has most frequently proved to give descriptions of teaching distinguishing "effective" from less "effective" teacher behaviour (Flanders 1970). In many places this instrument has been used in teacher training with favourable results.

Since the general concensus appears to be that observation instruments should be used by teachers and not on teachers (Brown 1968, Musella 1970, Medley 1971), we wish to make an attempt to introduce Flanders' interaction analysis through training by the teacher trainees themselves - training in making observations and in using and analysing the observations made, above all abservations of their own behaviour. The latter objective can be achieved via the use of devices for sound or sound/picture feedback, which has proved par-

ticularly valuable in MT.

Experiment 2 is planned to analyse the following questions:

a) Can student teachers learn to use Flanders' interaction analysis given six hours' tuition and practical instruction?

b) Can student teachers make use of sound reproductions of their teaching practice so as eventually to revise their classroom behaviour in what Flanders regards as a desirable direction?

c) Can trainee subject teachers make use of sound/picture reproductions to the same end as in b?

d) Is the playing back of both sound and picture more effective than sound playback only?

Scope:

48 student teachers, autmn term 1972. First term of training.

Methods:

Video tape recordings of the subjects' teaching practice before, during and after training in Flanders' interaction analysis (FIA).

One group of subjects is only allowed to listen, another is enabled to listen to and watch their teaching practice. The same video tape equipment is being used in both groups.

A different disposition is being used from that occurring in previous studies designed to compare sound and sound/picture feedback, where one group has been taped while the other has been video-taped, with the result that their practice conditions have not been identical. Probably the quality of the sound reproductions has also varied between experimental and control groups since different apparatus has been used.

The introduction to FIA took the form of a two-hour lesson in which the background and underlying theory of the instrument were discussed. The subjects then worked through a newly constructed CCTV programme of demonstration, practice and evaluation.

Results:

The question whether trainee teachers can learn to apply Flanders' interaction analysis after six hours' tuition can already be answered in the affirmative. The concluding evaluation tape was coded with an average agreement between observers of .55 - .66 calculated according to Scott's method.

The subjects have also coded a practice lesson of their own, which has been video-taped. Very positive attitudes were noted to self-confrontation steered with the aid of FIA. All except one of the subjects wished for more opportunities of self-analysis in this way.

Sponsor: National Board of Education

Reports published:

Brusling, Chr. Effects of cued modelling procedures and self-confrontation in a microteaching setting aimed at developing non-verbal behaviour. May 1972. Essay no. 3.

Tingsell, J-G. Behavioural observations using mechanical registration equipment. (Not translated). May 1972. Essay no. 2.

References:

Brown, B B Systematic Observations Relating Theory and Practice in the Classroom. Florida University. February 1969

Cooper, J M & Allen, D W Microteaching: History and Present Status. University of Massachusetts. June 1969

Flanders, N A Analyzing Teaching Behavior. Addison-Wesley Publ. Co. Reading. Massachusetts. 1970

Gall, M D et al. Improving Teachers' Mathematics Tutoring Skills Through Microteaching: A Comparison of videotape and Audiotape Feedback. Far West Laboratory for Educational Research and Development. Berkely, California. February 1971

Guelcher, W et al. Microteaching and Teacher Training: A Refined Version. Chicago University. June 1970

Johnson, W D & Pancrazio, J B The Effectiveness of Three Microteaching Environments in Preparing Undergraduates for Student Teaching. Paper presented at annual meeting, AERA. New York 1971

Medley, D M The Language of Teacher Behavior: Communicating the Results of Structured Observations to Teachers. The Journal of Teacher Education. Vol XXII, No. 2. Summer 1971. 157 - 165

Musella, D Improving Teacher Evaluation. The Journal of Teacher Education. Vol XXI, No. 1. Spring 1970. 15 - 21

Nash, R J & Agne, R M Competency in Teacher Education: A Prop for the Status Quo? The Journal of Teacher Education. Vol XXII, No. 2. Summer 1971. 147 - 156

Nuthall, G A Comparison of the Use of Microteaching with Two Types of Pupils - 10-Year-Old Pupils, and Peers Acting as Pupils. Christ Church University, New Zealand. Paper Presented at The International Microteaching Symposium at Tübingen, West-Germany. April 1972

Pereira, P & Guelcher, W The Skills of Teaching: A Dynamic Approach. Chicago University. June 1970

Schaefer, R J Teacher Education in the United States of America. Prospects in Education. Vol I. No. 2. 1970. 37 - 42

Address:
Pedagogiska institutionen
lärarhögskolan
Övre Husargatan 34
S-413 14 GÖTEBORG
SWEDEN